

## Product datasheet

# Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6294(2)] ab134910

Recombinant RabMAb

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### Overview

<b>Product name</b>	Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6294(2)]
<b>Description</b>	Rabbit monoclonal [EPR6294(2)] to Cytochrome P450 17A1/CYP17A1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human adrenal gland lysate, mouse and rat testis lysate. IHC-P: Human and mouse testis tissues.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C.
<b>Storage buffer</b>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR6294(2)

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab134910 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/10000 - 1/50000. Predicted molecular weight: 57 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

### Function

Conversion of pregnenolone and progesterone to their 17-alpha-hydroxylated products and subsequently to dehydroepiandrosterone (DHEA) and androstenedione. Catalyzes both the 17-alpha-hydroxylation and the 17,20-lyase reaction. Involved in sexual development during fetal life and at puberty.

### Pathway

Lipid metabolism; steroid biosynthesis.

### Involvement in disease

Defects in CYP17A1 are the cause of adrenal hyperplasia type 5 (AH5) [MIM:202110]. AH5 is a form of congenital adrenal hyperplasia, a common recessive disease due to defective synthesis of cortisol. Congenital adrenal hyperplasia is characterized by androgen excess leading to ambiguous genitalia in affected females, rapid somatic growth during childhood in both sexes with premature closure of the epiphyses and short adult stature. Four clinical types: "salt wasting" (SW, the most severe type), "simple virilizing" (SV, less severely affected patients), with normal aldosterone biosynthesis, "non-classic form" or late onset (NC or LOAH), and "cryptic" (asymptomatic).

### Sequence similarities

Belongs to the cytochrome P450 family.

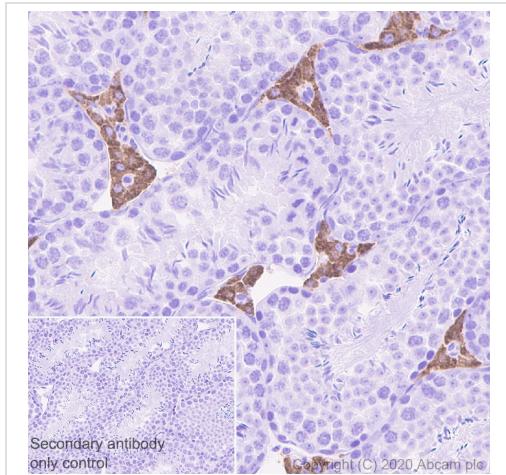
### Post-translational modifications

Phosphorylation is necessary for 17,20-lyase, but not for 17-alpha-hydroxylase activity.

### Cellular localization

Membrane.

## Images

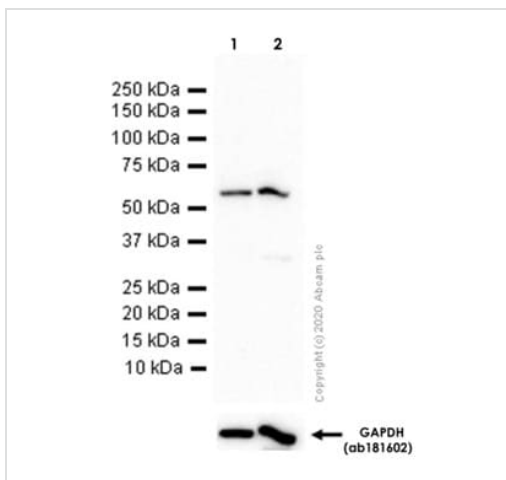


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6294(2)] (ab134910)

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling Cytochrome P450 17A1/CYP17A1 with ab134910 at 1/250 followed by a Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) at Ready to use dilution. Cytoplasmic staining on mouse Leydig cells. The section was incubated with ab134910 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) at Ready to use dilution.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Western blot - Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6294(2)] (ab134910)

**All lanes :** Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6294(2)] (ab134910) at 1/1000 dilution

**Lane 1 :** Mouse testis lysate

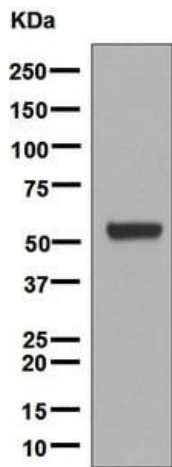
**Lane 2 :** Rat testis lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 57 kDa



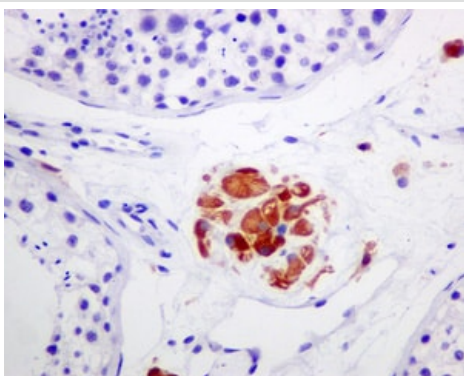
Western blot - Anti-Cytochrome P450  
17A1/CYP17A1 antibody [EPR6294(2)] (ab134910)

Anti-Cytochrome P450 17A1/CYP17A1 antibody [EPR6294(2)]  
(ab134910) at 1/10000 dilution + Human adrenal gland lysate at 10  
µg

#### Secondary

HRP-conjugated goat anti-rabbit IgG polyclonal at 1/2000 dilution

**Predicted band size:** 57 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-Cytochrome P450  
17A1/CYP17A1 antibody [EPR6294(2)] (ab134910)

Immunohistochemical analysis of paraffin-embedded Human testis  
tissue labelling Cytochrome P450 17A1/CYP17A1 with ab134910  
at 1/250 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6  
before commencing with IHC staining protocol.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Cytochrome P450 17A1/CYP17A1 antibody  
[EPR6294(2)] (ab134910)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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